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**TETRADECACHLOROCYCLOHEXASILANE-  
DIANION-CONTAINING COMPOUND**

(57) Abstract:

**PROBLEM TO BE SOLVED:** To obtain a compd. for vapor deposition of an amorphous silicon film by bringing a metallic hydride reducing agent into contact with a tetradecachlorocyclohexasilane.dianion-contg. compd. obtd. by bringing a reagent compsn. comprising a tert. polyamine into contact with trichlorosilane.

**SOLUTION:** Trichlorosilane is reacted with a reagent compsn. comprising a tert. polyamine such as N,N,N',N'',N'''-pentaethyldiethylenetriamine(pedeta) in a molar ratio of (0.1:1) to (10:1) in a solvent such as dichloromethane, crystallization is carried out at  $\leq$  room temp. and a solvent such as pentane is added to deposit a tetradecachlorocyclohexasilane.dianion-contg. compd. represented by the formula  $[\text{pedeta}.\text{SiH}_2\text{Cl}-1]_2[\text{Si}_6\text{Cl}_{14}-2]$ . This compd. is reacted with a metallic hydride reducing agent such as  $\text{AlH}_4$  in an org. solvent at  $-110$  to  $+150^\circ\text{C}$  to obtain cyclohexasilane. It is reacted with a Grignard reagent to obtain dodecaorganocyclohexasilane.

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